

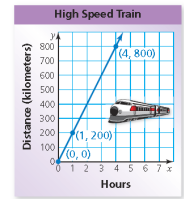
## Math 7H - Unit 3

## Day 7 - Interpreting Graphs of Proportional Relationships

## Lesson Objectives:

- I can determine whether quantities are proportional by graphing on a coordinate plane.
- I can explain what a point  $(x, y)$  on the graph of a proportional relationship means in terms of the situation.

The distance traveled by a high speed train is proportional to the number of hours traveled. Interpret each plotted point in the graph.



$(0, 0)$  The train has started moving at zero hours.

$(1, 200)$  In 1 hour, the train has gone 200 km. The train has speed, unit rate, of 200 km/hr.

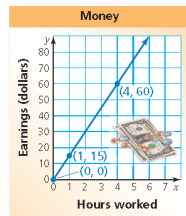
$(4, 800)$  In 4 hours, the train traveled 800 km.

Interpret each plotted point in the graph of the proportional relationship.

$(0, 0)$  Didn't work any hours, Didn't earn any money.

$(1, 15)$  In 1 hour, you earned \$15. You make \$15 an hour (unit rate or wage).

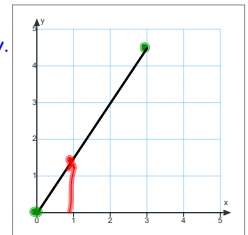
$(4, 60)$  You earned \$60 in 4 hours.



In the graph of a proportional relationship, you can find the unit rate from the point  $(1, y)$ .

The graph of a proportional relationship passes through  $(3, 4.5)$  and  $(1, y)$ . Find  $y$ .

$$y \times 1.5$$

Homework

## Interpreting Proportional Relationships WKS

## \* Individual Think Time \*



What to do if you get stuck...

- Reread the problem. Did you write it down correctly?
- Reread your notes. Is there a problem similar that we did together in class?
- Find a problem similar in your book. Try this one to see if it helps.
- Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...

